

## ABSTRACT OF THE DISCLOSURE

An up-sampled half-band reconstruction filter has a seagull architecture in the form of a pair of parallel IIR filters, one receiving as an input an input signal delayed by one sample time and the other receiving as an input a reverse version of the input signal delayed by one sample time. The outputs from the pair of parallel IIR filters are combined with the input signal to produce a reconstruction filter output in response to the input signal.